

WHAT IS CLAIMED IS:

1. A projector, comprising:  
a light source for emitting light;  
a spatial light modulator for modulating the light from the light source in accordance with an image signal; and  
a projector lens for projecting the light modulated by the spatial light modulator,

wherein the spatial light modulator is a tilt mirror device comprising a movable mirror element reflecting the light from the light source in the direction of the projector lens or in the direction other than that of the projector lens; and

wherein the projector further comprises:

a light-intensity measuring section provided in an imaging position of the light source or in the vicinity of the imaging position for measuring the light intensity of the light reflected in the direction other than that of the projector lens; and

a light-source controller for controlling the light source in accordance with a signal from the light-intensity measuring section.

2. A projector according to claim 1, wherein

the light source includes a plurality of solid-state light-emitting elements;

the light-intensity measuring section includes a plurality of light-intensity measuring elements corresponding to the plurality of solid-state light-emitting elements; and

the light-source controller controls each of the plurality of solid-state light-emitting elements.

3. A projector according to claim 1, further comprising an operation unit for performing a specified calculation based on the signal from the light-intensity measuring section and outputting the calculation to the light-source controller.

4. A projector according to claim 3, wherein the operation unit performs the specified calculation using the number of the movable mirror elements reflecting the light from the light source in the direction other than that of the projector lens.

5. A projector according to claim 1, wherein

the light source comprises a first light source for emitting light in a first wavelength range and a second light source for emitting light in a second wavelength range different from the first wavelength range;

the first light source and the second light source are arranged in approximately symmetrical positions with respect to the projector lens; and

the light-intensity measuring section comprises a first light-intensity measuring section and a second light-intensity measuring section, wherein

the first light-intensity measuring section is arranged in the vicinity of the second light source and out of the light from the first light source, measures the light intensity of the light reflected in the direction other than that of the projector lens; and

the second light-intensity measuring section is arranged in the vicinity of the first light source and out of the light from the second light source, measures the light intensity of the light reflected in the direction other than that of the projector lens.

6. A projector according to claim 5, wherein

the first light-intensity measuring section and the second light source are formed on an identical substrate, the first light-intensity measuring section being arranged among the plurality of solid-state light-emitting elements of the second light source; and

the second light-intensity measuring section and the first light source are formed on an identical substrate, the second light-intensity measuring section being arranged among the plurality of solid-state light-emitting elements of the first light source.

7. A projector according to claim 5, wherein

the first light-intensity measuring section and the second light source are formed on an identical substrate, the first light-intensity measuring section being arranged in a region different from the second light source; and

the second light-intensity measuring section and the first light source are formed on an identical substrate, the second light-intensity measuring section being arranged in a region different from the first light source.

8. A projector, comprising:

a light source for emitting light;

a spatial light modulator for modulating the light from the light source in accordance with an image signal;

a projector lens for projecting the light modulated by the spatial light modulator; and

a light-source controller,

wherein the spatial light modulator is a tilt mirror device comprising a movable mirror element reflecting the light from the light source in the direction of the projector lens or in the direction other than that of the projector lens:

wherein the light source comprises a first light source for emitting light in a first wavelength range and a second light source for emitting light in a second wavelength range different from the first wavelength range; wherein

the first light source and the second light source are arranged in approximately symmetrical positions with respect to the projector lens;

the first light source receives the light from the second light source to measure the light intensity of the second light source; and

the second light source receives the light from the first light source to measure the light intensity of the first light source; and

the light-source controller controls the light source on the basis of the measured light intensity.

9. An optical device, comprising:

a light source for emitting light;

a spatial light modulator for modulating the light from the light source in accordance with an image signal; and

an imaging lens for imaging the light modulated by the spatial light modulator onto a specified surface,

wherein the spatial light modulator is a tilt mirror device comprising a movable mirror element reflecting the light from the light source in the direction of the imaging lens or in the direction other than that of the imaging lens; and

wherein the optical device, further comprises:

a light-intensity measuring section provided in an imaging position of the light source or in the vicinity of the imaging position for measuring the light intensity of the light reflected in the direction other than that of the projector lens; and

a light-source controller for controlling the light source in accordance with a signal from the light-intensity measuring section.